

# SLIT-SHAPED NOZZLE FOR STEEL PLATE COOLING DEVICE

Publication number: JP58068419

Publication date: 1983-04-23

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Classification:

- international: **B05C5/00; B21B45/02; C21D9/52; B05C5/00; B21B45/02; C21D9/52;** (IPC1-7): B21B45/02; C21D9/52

- european: B05C5/00E; B21B45/02C4L12

Application number: JP19810167055 19811021

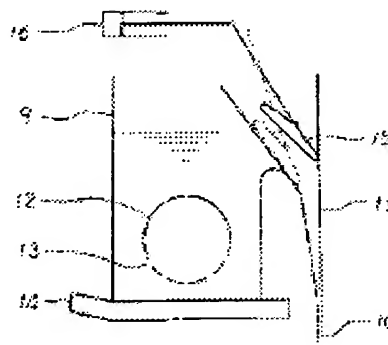
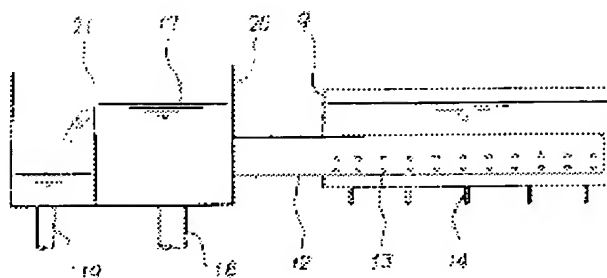
Priority number(s): JP19810167055 19811021

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## Abstract of JP58068419

**PURPOSE:** To obtain a nozzle capable of forming a stable laminar flow, having an excellent sealing performance in an off-state, and a simple construction, by providing a flapper gate for controlling cooling water to the upper part of the nozzle, and a header capable of supplying an extremely low-pressure water-flow, having an open top tank-construction.

**CONSTITUTION:** A header 9 is arranged so as to form a slit-shaped laminar flow, just above a running strip and perpendicularly to the running direction of the strip. Cooling water is supplied from an open head tank 20, arranged adjacently to the header 9 and capable of preparing an extremely low pressure and a large flowing quantity of water, to the header 9 through a pipe 12. An on-off control of a flow 10 supplying is performed by opening and closing a flapper gate 15, locating above a slit-nozzle 11, with the aid of a cylinder 16. In an on-state, the gate 15 locates itself just like a part of the nozzle 11 and forms a smooth water flow to supply a stable flow 10 to the nozzle 11. In an off-state, the gate 15 contacts with the inner wall of the nozzle 11 tightly, and shuts the water flow perfectly.



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